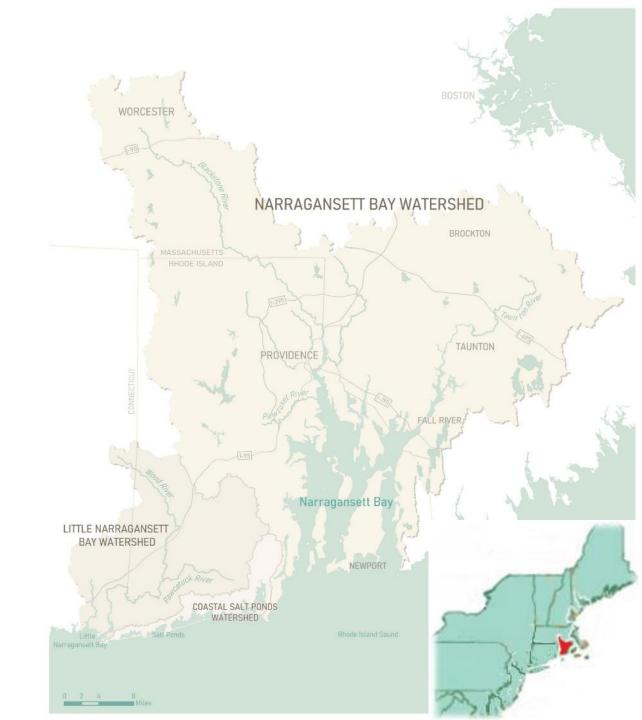


# Narragansett Bay Estuary Program

- Narragansett Bay, Little Narragansett Bay, Coastal Ponds, and their watersheds in RI, MA, and CT
- Services include cross-boundary consensus-building, scientific comms, and project funding
- Water quality and habitat improving, but climate change is a big problem
- Small group—strives for big impact!



Samuel Slater opens his first textile mill in Rhode Island, the first American factory to successfully produce cotton yarn using water-powered machines.

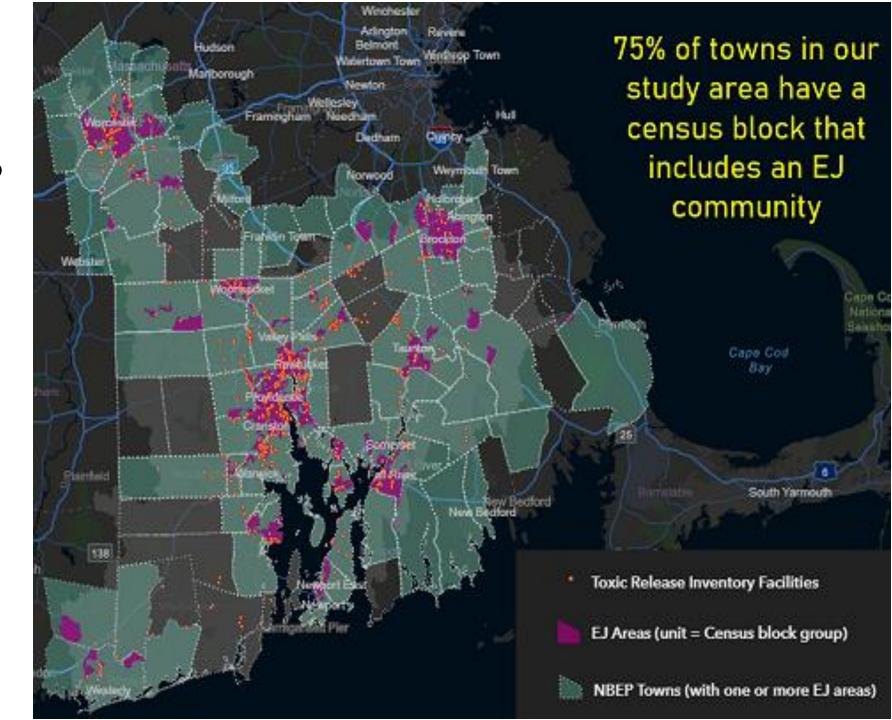


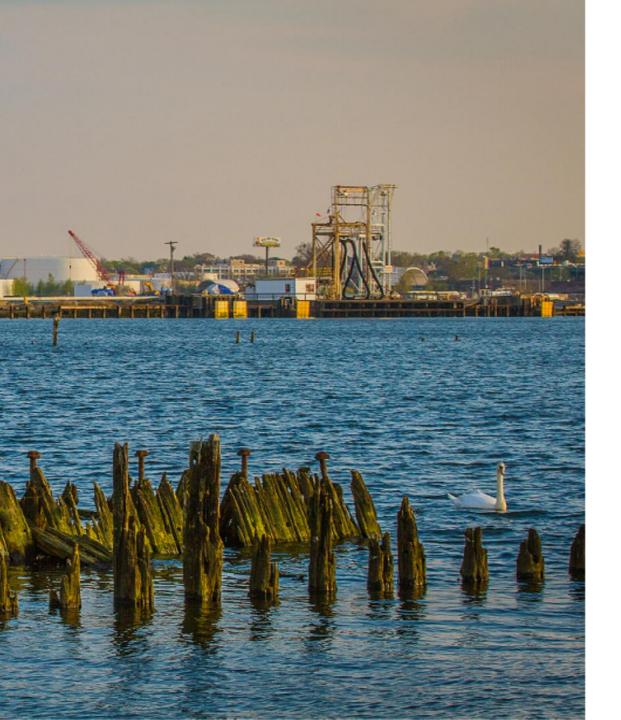
# Demographics

- Four indigenous nations native to area
- Birthplace of industrial revolution
- 2 million people across 113 towns—very high population density
- Manufacturing economy shifted to health services, tourism, and education
- People of color in the region's biggest, formerly industrial cities and indigenous people left way behind—some of most overburdened areas in New England

## NBEP & EJ How Did it Start?

- Picture is worth 1000 words!
- Bottom line: We cannot meet our mission if we do not better serve EJ communities





## Our Goals

 Get informed—Listen and learn about the place and its people and the EJ and DEIJ challenges faced



 <u>Take concrete action</u>—Meaningfully engage, assess impact of actions, and enact polices that enable us to maximize benefits to all



 <u>Lead by example</u>—Energize the partnership to elevate justice, equity, and humanity across the region

- 1. Diversity, Equity, Inclusion, and Justice (DEIJ) Training.
- 2. DEIJ Organizational Assessment.
- 3. EJ Story Map.
- 4. EJ On-line Mapping Tool.
- 5. Project Scoring Sheet.
- 6. CCMP Action Planning.



ABOUT US

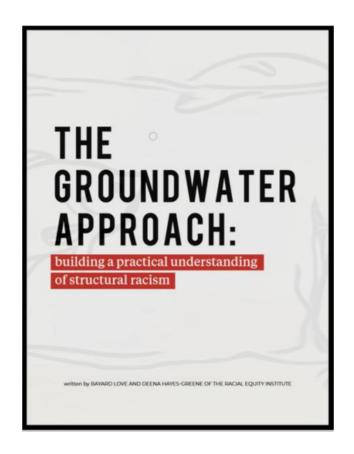


## **Action Planning Resources**

Let's move the needle of change! The Estuary Program is developing and piloting a set of working resources and planning tools to look systematically at our own work through the lenses of racial equity, sustainability, and climate resilience. We hope other organizations and regions may find them useful.

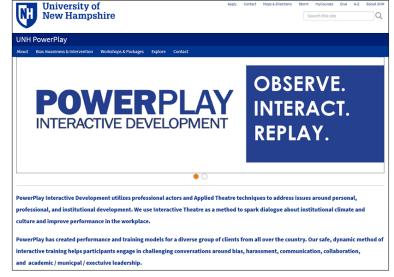
Photo Credit: NBEP.

# **DEIJ Training**

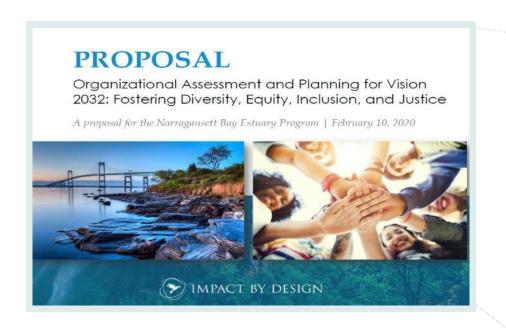




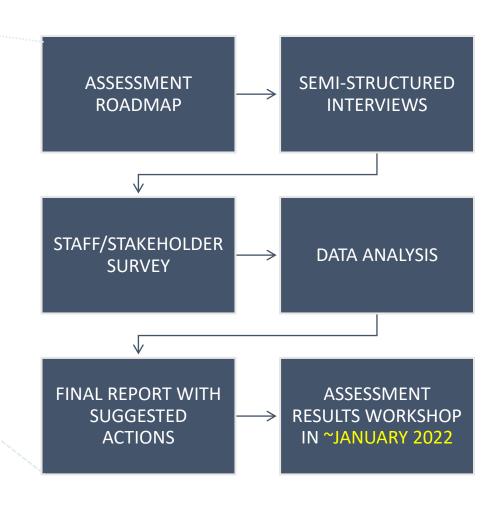




## DEIJ Organizational Assessment



- Third party experts
- Looking at <u>whole</u> partnership
- Learn how we can all do better
- Will inform future policy—but didn't wait to act...



# EJ Story Map

- Mapped EJ "Priority Areas" in study area
- Mapped environmental and health conditions
- Overlaid them to show inequities and burdens
- Story Map here:

   https://storymaps.arcgi
   s.com/stories/61682f2
   963364fbbbc832c53a7
   cc7d09



Photo Credit: NBEP

# **EJ Priority Areas**

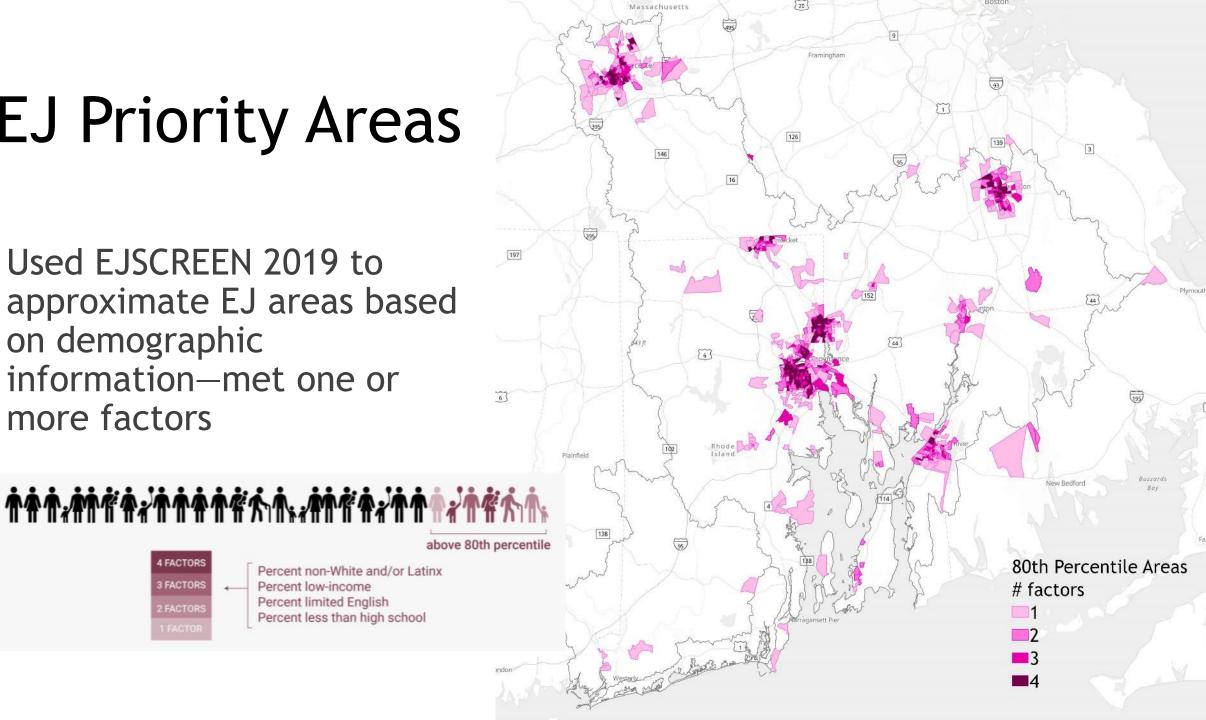
 Used EJSCREEN 2019 to approximate EJ areas based on demographic information—met one or more factors

3 FACTORS

Percent non-White and/or Latinx

Percent low-income

Percent limited English Percent less than high school



## Environmental and Health Conditions

## Land

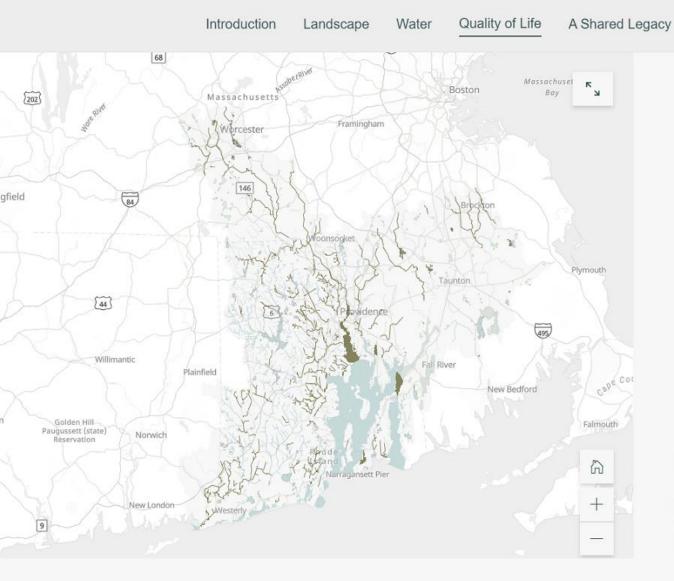
- Land Use
- Protected Open Spaces
- Tree Benefits CO<sub>2</sub>

## Water

- Water Quality
- Wastewater Treatment Facilities
- Tree Benefits Runoff
- Flooding

## Quality of Life

- Traffic Proximity
- Toxic Release Inventory
- Respiratory Hazards
- Tree Benefits Air Pollution
- Urban Heat Islands



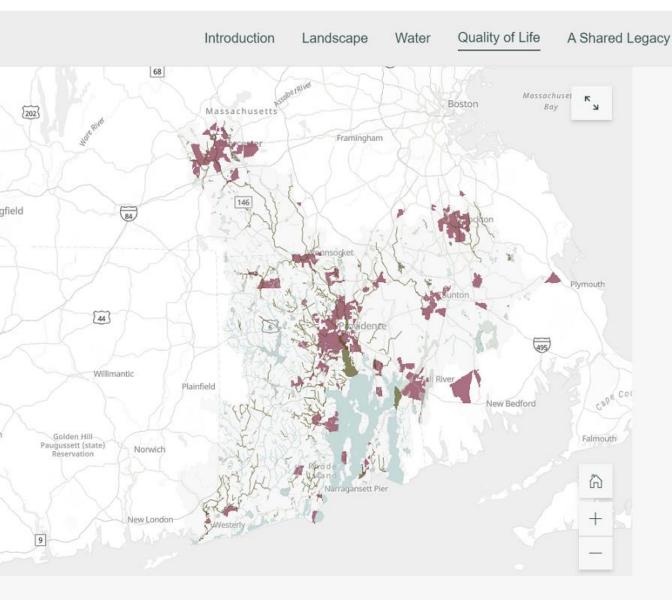
# Quintessential to our regional identity is our ability to hit the beach, go fishing or boating, or hike a nature trail. Clean water makes those experiences safer and more enjoyable.

Resources

Methods & Recommendations

Taking Steps

Unfortunately, not all our waters are pristine. Beaches and shellfishing are regularly closed in the summer due to bacteria from old septic systems and land runoff (RI Beach Monitoring, RI Shellfishing Closures). Trash, odor, and other unpleasant things also detract from enjoyment of the water. This map shows state recreational water quality assessments based on testing for bacteria and other factors. 78% of priority communities are within a half mile of an impacted water body (dark green). There are more impacted waters compared to acceptable waters (blue) in priority areas, while the reverse is true for surrounding areas.



### VIEW PRIORITY AREAS ON MAP (on/off)

Methods & Recommendations



#### Ratio of Impacted to Acceptable Waters for Recreational Use

**Priority Areas** 

Taking Steps



Impacted : Acceptable



Resources

Outside **Priority Areas** 



Impacted: Acceptable







Total count of waterbodies within 0.5 miles classified as impacted for recreational use divided by total count of waterbodies within 0.5 miles classified as acceptable for recreational use; Data Sources: RIDEM and MassDEP Assessment Databases, 2014. NBEP dataset summarizing reporting across MA and RI is available for download on our GIS Data Hub (Water Quality for Recreation, 2014, NBEP 2017).



This is an interactive map! Zoom and pan for a closer look. Click locations on the map for pop-up information.



Introduction

Landscape

Water

Quality of Life

A Shared Legacy

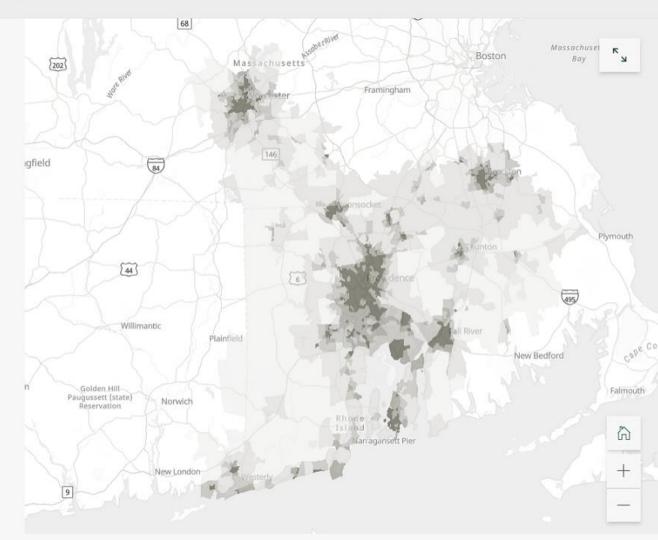
Taking Steps

Methods & Recommendations

Resources

# Regionally, trees filter and remove over 61 million pounds of air pollutants each year-but areas with less trees receive fewer benefits.

Trees absorb harmful airborne pollutants—both particulate and gaseous—that can cause asthma, respiratory and eye irritation, and chronic illness over long-term exposure. Notice that many of the areas most impacted by air toxics (see previous map) also have the least protection from air pollution. That is, areas with greater pollution are also, largely, areas with fewer trees (darker browns).





Introduction Landscape Water Quality of Life A Shared Legacy Taking Steps Methods & Recommendations Resources

### VIEW PRIORITY AREAS ON MAP (on/off)

### Pounds of Air Pollution Removed by Trees

-900,000 -150,000 -25,000 -9,000 -3,000 0

Minimal Air

Filtration

Priority Areas



4,506

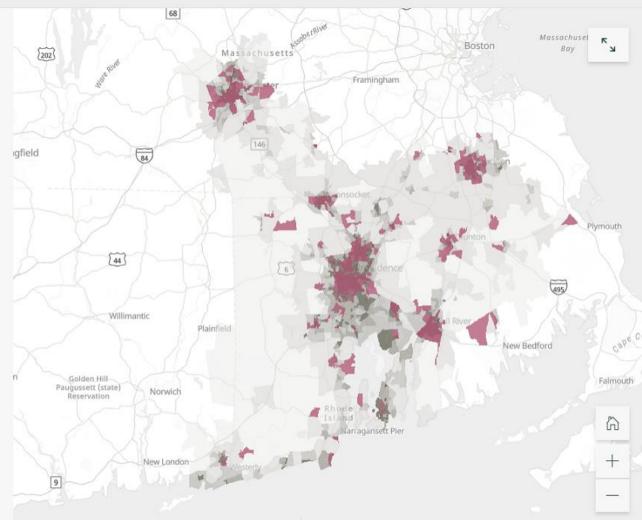
Outside Priority Areas



Average annual pounds of air pollution removal (CO, NO2, O3, PM2.5, PM10, SO) by the tree canopy per block group in priority areas as compared to surrounding areas; Data Source; iTree Landscape v4.3.1.



This is an interactive map! Zoom and pan for a closer look. Click locations on the map for pop-up information.

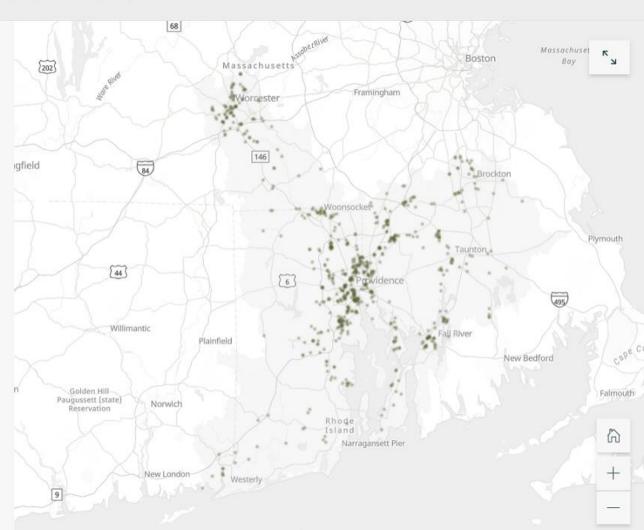




Introduction Landscape Water Quality of Life A Shared Legacy Taking Steps Methods & Recommendations Resources

# Priority communities are home to greater numbers of industrial facilities that manage toxic chemicals.

The EPA Toxic Release Inventory compiles all industrial and federal facilities that manage chemicals that cause cancer, chronic illness, acute health effects, or environmental harm. Facilities are required to report to the EPA annually on substance management and chemical releases to provide data to the public and inform emergency planning. This map shows the location of the 786 facilities identified in the region.



Introduction Landscape Water Quality of Life A Shared Legacy Taking Steps Methods & Recommendations Resources

#### VIEW PRIORITY AREAS ON MAP (on/off)

## Density of Facilities That Manufacture, Produce or Otherwise Use Toxic Substances

Priority Areas







2.5
Facilities/Sq. Mile

Outside Priority Areas

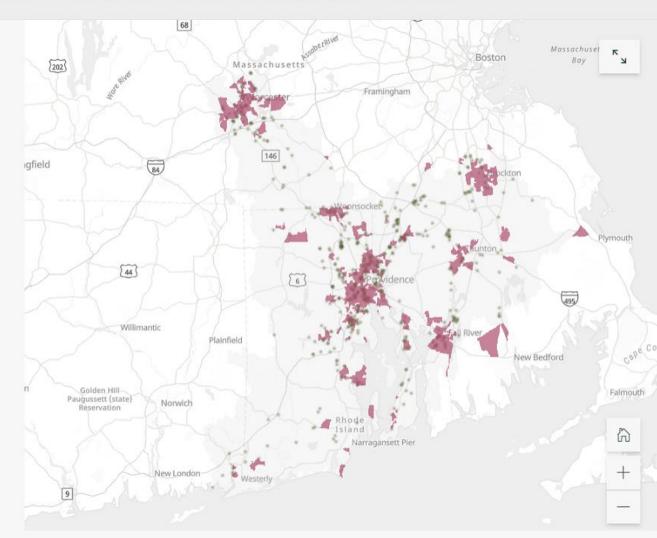


0.5 Facilities/Sq. Mile

Total count of toxic release inventory (TRI) facilities divided by total square miles; Data Source: EPA Facility Registry Service Collection 2018. Note that this map displays the location of TRI facilities and does not indicate their compliance or non-compliance with toxic chemical management regulations.

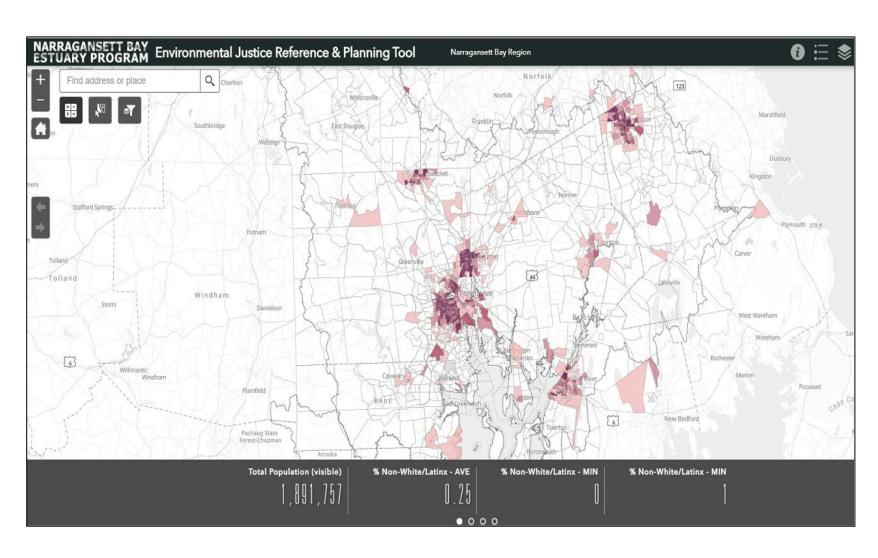


This is an interactive map! Zoom and pan for a closer look. Click locations on the map for pop-up information.



# On-line EJ Mapping Tool

- Simple tool used to characterize demographics of proposed project area
- Helps locate, portray, and prioritize communities where the impact of environmental hazards could be intensified
- Not the authority
- Tool and user guide here: <u>https://www.nbep.org/plan</u> <u>ning-for-equity</u>



# Project Scoring Sheet

PROJECT SCORING SHEET				
Evaluation Criteria	Weight	Score	Total	
<ol> <li>Environmental Justice. The project takes place in an environmental justice area identified using NBEP's <u>Environmental Planning &amp; Mapping Tool</u> or the proposal justifies that it otherwise positively impacts underserved communities (Enter 2 points under Score).</li> </ol>				
Reviewer Comments:				
Capacity and Function. Applicant has the necessary expertise and capacity to carry out the project based on completion of projects of similar scope, duration, and complexity.	3			
Reviewer Comments:				
Cost, The cost of the project is line with similar activities undertaken in the region, generally accepted costs, and current market conditions.	2			
Reviewer Comments:				

### **Evaluation Criteria**

6. <u>Environmental Justice</u>. The project takes place in an environmental justice area identified using NBEP's <u>Environmental Planning & Mapping Tool</u> or the proposal justifies that it otherwise positively impacts underserved communities (Enter 2 points under Score).

subject maker, scope, scale, and location of the project.		
Reviewer Comments:		
	FINAL TOTAL:	
Tirel O		
Final Comments		

- Hardwiring into our project selection
  - New NBEP Proposal Scoring Sheet provides points for projects located in or otherwise benefiting EJ communities

# **CCMP Planning**

#### Test it.

We'll evaluate every action plan against our core values:



### Preparedness for climate change

Our work will be flexible and durable to changing conditions.



### Equitable, just, and fair benefits

Our decisions will balance who is impacted, where resources are needed, and who will benefit.



### Sustainability of resources

Our actions will uphold the benefits of our rich regional heritage for generations to come.



### Accountable an adaptive

We will track and assess our actions and change direction off course from our vision.

- Hardwiring into our planning process—must assess DEIJ/EJ impact for all CCMP actions
- More here: <u>www.Vision2032.org</u>

### Part 2: Impact Assessment Worksheet

Purpose: PRIOR to detailed planning, identify opportunities to work in the most impacted geographies and ways to assess potential **positive or negative** impact and take steps maximize benefits and reduce burdens of this action relative to equity and justice, sustainability, and climate resilience. **Add tasks to the subject action (or modify the action or create concurrent or precursor action) that achieves these goals. New tasks may include research, assessment, planning, capacity-building, fundraising, outreach, or other activities.** 

**Geographic Impact:** What geographic areas in the region are most negatively impacted by this issue and/or would benefit most from work under this action? Specify where and how. You may consider geographies of impacts at site, local, watershed, and/or regional scales.

ocal, watershed, and/or regional scales.	
Environmental Impacts:	Socioeconomic Impacts:

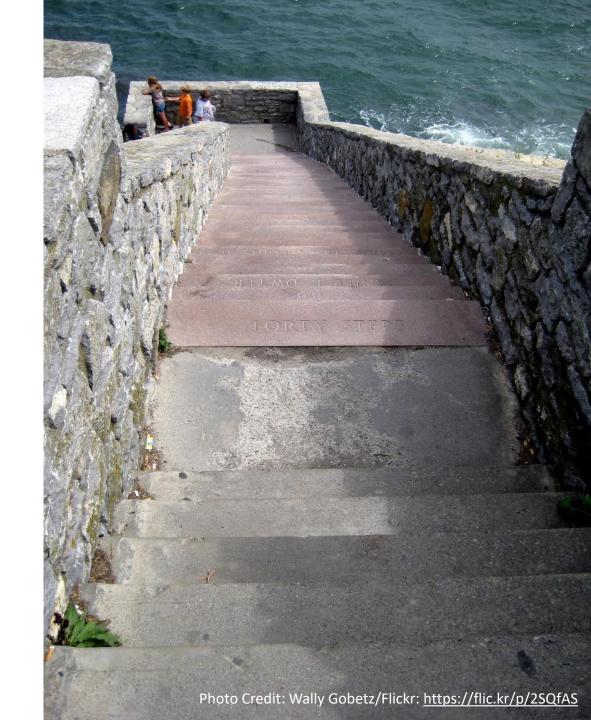
**Climate Resilience:** What could be added/modified to help increase environmental and social benefits and/or reduce burdens/vulnerability relative to the expected consequences of climate change?

**Sustainability:** What TASKS could be added to support long-term beneficial uses, cultural practices, environmental services, and beneficial human-environment relationships.

**Equity and Environmental Justice:** What TASKS could be added to maximize diversity, equity, inclusion, or justice around this issue; reduce burdens to those most impacted; ensure equitable benefits, opportunities, and impacts; and/or amplify communities' ability to respond to this issue?

# Our Next Steps

- We are still learning...and piloting
- Release DEIJ Assessment and then host public workshop for study area
- Increase strategic outreach
- Refine existing and implement new policies per assessment results and outreach to move the needle as much as we can!





# Some Tips

- 1. Be patient—listen and learn first.
- 2. Know where the EJ communities are.
- 3. Don't be "extractive" of information— assure mutually beneficial engagement.
- 4. Budget for this work—it is not cheap.
- 5. Use simple compelling visuals and tools to educate and inform early actions.
- 6. Look to build EJ/DEIJ into your institutional polices so addressing these issues is a must.



# Thank you!

Mike Gerel

mike.gerel@nbep.org

(804) 332-1197

www.nbep.org